

Claims

1. Arrangement for division of animals into groups and transfer of groups of animals to a stunning apparatus (3), characterized in that it comprises an oblong corridor section (10) in which animals can be driven from an entrance end to an exit end, that it has a division gate (12) in the corridor section between the entrance end and the exit end, which gate is placed in such a way that the corridor area (10b) between the division gate and the exit end has room for a number of animals corresponding to the group size, and that a transfer section (16) is placed in continuation of the corridor section (10) at the exit end of the section which transfer section has room for a number of animals corresponding to the group size, and which section has a connection with the entrance to the stunning apparatus.
2. Arrangement according to claim 1, characterized in that the transfer section (16) is placed directly between the exit end of the corridor section and the entrance to the stunning apparatus.
3. Arrangement according to claim 1, characterized in that the transfer section (16) has a rectangular shape with a short side placed opposite the exit end of the corridor section (10) and a long side placed opposite the entrance to the stunning apparatus.
4. Arrangement according to claim 3, characterized in that the transfer section (16) has a movable wall (18) at the other long side, which wall can be moved over to the long side opposite the entrance to the stunning apparatus.
5. Arrangement according to claim 1, characterized in that an access gate (13) is placed at the entrance of the transfer section from the corridor section (10).
6. Arrangement according to claim 1, characterized in that it comprises a gate device, placed at the corridor section (10), with a travelling sliding gate (14) or a travelling elevating gate which can be moved in the corridor area (10b) from the entrance end to the exit end and can return with the gate withdrawn from or elevated above the corridor section.

7. Arrangement according to claim 5 and 6, characterized in that travelling sliding/elevating gate can be moved from a position at the division gate (12) to a position at the entrance gate (13).

5 8. Arrangement according to claim 7, characterized in that the gate device has a travelling sliding gate and comprises a first transport mechanism to pull the travelling sliding gate (14) sideways out of the corridor section (10) and push it sideways into the corridor section through gaps in one side wall of the corridor at the access gate (13) and the division gate (12), respectively, and a second transport mechanism to move the 10 travelling sliding gate (14) in the longitudinal direction of the corridor section from a starting position (14c) in front of the division gate (12) to an end position at the access gate (13), and to move the travelling sliding gate (14) back outside the corridor section, after it has been pulled sideways out of the corridor section (10), from a position (14a) which is opposite the end position at the access gate and to a second position (14b), which 15 is opposite the starting position (14c) in front of the division gate (12).

9. Arrangement according to claim 8, characterized in that the first transport mechanism comprises a guide device, in which the travelling sliding gate (14) is displaceable mounted so that the gate, by means of a motor, can be displaced out of the corridor through a gap in 20 one side wall of the corridor at the access gate (13), from a position in the corridor section to a position (14a) outside the section, and can be moved in the opposite direction into the corridor through a gap in the same side wall of the corridor at the division gate (12), and that the second transport mechanism is connected with the guide device and the motor in such a way that it can transport these and the travelling sliding gate (14) in the 25 longitudinal direction of the corridor section.

10. Arrangement according to claim 1, characterized in that the division gate (12) can be opened partially to a position, which allows animals to walk one by one through the passage formed in the corridor section (10) by the opening process, and that the gate (12) 30 can also be opened completely to form an opening of the same width as the corridor section, which opening allows several animals to be driven next to each other by means of a driving device.

11. Arrangement according to claim 1, characterized in that the corridor area (10a) of corridor section between the entrance end and the division gate (12) has room for a flock of animals of the size that is wanted to be divided into groups.

5 12. Arrangement according to claim 1, characterized in that it comprises a driving gate (15), which can be moved in the longitudinal direction of the corridor section between a starting position at the entrance end of the corridor section and to a position at the division gate (12), such as a travelling sliding gate or a travelling elevating gate.

10 13. Arrangement according to claim 1, characterized in that it comprises an entrance opening at the entrance end of the corridor section by one of the long side walls of the corridor section (10), which opening can be closed by means of a gate (11).

14. Arrangement according to claim 1, characterized in that it comprises a stunning 15 apparatus.

15. Method for division of animals into groups and transfer of groups of animals to a stunning apparatus (3), characterized in

20 a) that animals are driven in an oblong corridor section (10) from an entrance end towards an exit end and past an open division gate (12), which is placed between the entrance end and the exit end, the division gate being placed in such a way that the corridor area (10b) between the division gate (12) and the exit end has room for a number of animals corresponding to the group size,

25 b) that the division gate (12) is closed when a number of animals corresponding to the group size have passed,

c) that the group of animals is driven into a transfer section (16); placed in continuation of the corridor section (10) at the exit end of the section when the transfer section (16) is ready to receive a group of animals, which transfer section has room for a number of animals corresponding to the group size and has connection with the entrance to the stunning apparatus,

30 d) that the access from the corridor section (10) to the transfer section (16) is closed,

- e) that the group of animals in the transfer section (16) is driven into the stunning apparatus (3) when this is ready to receive a group of animals, and
- f) that the process steps a) to e) are repeated as long as there are animals in the corridor area (10a) between the entrance end and the division gate (12), the division gate (12) being opened between each cycle.

5 16. Method according to claim 15, characterized in that the transfer section (16) has a rectangular shape with a short side placed opposite the exit end of the corridor section (10) and a long side placed opposite the entrance to the stunning apparatus and that a movable wall (18) at the other long side is moved over to the long side placed opposite the entrance to the stunning apparatus in connection with process step e).

10 17. Method according to claim 15, characterized in that animals are driven in the corridor area (10b) between the division gate and the exit end by means of a gate device with a travelling elevating or travelling sliding gate and that the elevating/sliding gate is returned 15 with the gate pulled out of or elevated above the corridor section.

20 18. Method according to claim 15, characterized in that the division gate (12) is opened partially to a position which allows animals to walk one by one through the passage formed by the opening process when the number of animals on the corridor area (10a) between the entrance end and the division gate exceeds the number of animals in a group.

25 19. Method according to claim 15, characterized in that a flock of animals to be divided in groups is driven into the corridor area (10a) between the entrance end and the division gate and that an entrance gate (11) in the entrance end of the corridor section is closed when all animals in the flock has entered the area.

30 20. Method according to claim 15, characterized in that animals on the corridor area (10a) between the entrance end and the division gate are driven forwards by means of a travelling elevating or travelling sliding gate.